Alpha 1 Quick Start Guide

Thank you for purchasing Alpha 1. This document describes the simple steps to create your sounds using Alpha 1.

Installation instructions

Two user units are included in this package: Alpha 1 user oscillator and A1Chorus user mod fx. Both are compatible with Prologue, Minilogue xd, and NTS-1.

Download and install the librarian software and KORG USB MIDI driver compatible with your synthesizer and computer from <u>KORG's website</u>. After installing the software, connect the synthesizer to your PC or Mac. Then open the digital librarian software.

- (1) Select the "USER OSCILLATORS" tab in the librarian window.
- (2) Find the folder for your synthesizer in the package and open it. Drag the file named "alpha1.****unit" into the USER OSCILLATORS list and drop it on the desired row (**** is "prlg" or "mnlgxd" or "ntkdig").
- (3) Next, select the "USER MODULATION FX" tab, and drag-and-drop the file "a1chorus.****unit" into the list.
- (4) Press the "SEND ALL" button in the upper right corner of the window.

					PROGRAMS		USER-OSC/FX
minilogue xd			Prog 001		SEND	SEND ALL	
	POLYPHONIC ANALOGUE SYNTHESIZER		Init Program		RECEIVE	RECEIVE RECEIVE ALL RECEIVE	
		(1)	(3)				
	PROGRAM	USER OSCILLATORS	USER MODULATION FX US		LAY FX	USER REVERB FX	MICROTUNING
	NAME	VERSION	API				
1							
2		(2)					
3							
4							

Oscillator Parameters

Alpha 1 generates the waveforms of Roland Alpha Juno DCO. There is also a high pass filter built into the oscillator unit.

The Alpha 1's waveform is the sum of four basic waveforms: pulse, sawtooth, sub-oscillator, and noise. To edit the oscillator sound, set parameters 1 to 5, the shape parameter, and the shift-shape parameter.

The shape parameter changes the PWM value for PWM-enabled waveforms (Pulse 3 and Saw 3.) The shift-shape parameter selects one of the four high-pass filter configurations.

Parameter	1	2	3	4	5	6	Shape	ShiftShape
Target	Pulse	Sawtooth	Sub	Sub-level	Noise-level	LFO mode	PWM	HPF

Parameter 1 to 3 select waveforms. The waveforms corresponding to each parameter values are shown below:



Parameter 4 sets the mix level of the sub-oscillator, and parameter 5 sets the noise level. Setting these parameters to 1 will set the volume to zero, and setting them to 4 will set the volume to maximum. Parameter 6, LFO mode, is described in Appendix 1.

Note that Alpha 1 is a single oscillator. All (pulse, sawtooth, and sub-oscillator) waves are perfectly synchronized. For example, when pulse 1 and saw 1 are selected, Alpha 1 will generate the waveform below. The pulse and sawtooth waves do not get behind each other.



The Shift-shape parameter changes the high pass filter configuration. There are four configurations. Configuration 2 is the pass-through mode (no filter.)



A1chorus user mod fx

Because the chorus effect plays an important role in the Alpha Juno's sound, A1Chorus unit is included in the package. Although A1Chorus is not a true emulation of the BBD chorus effect, it does have at least some characteristics similar to the Alpha Juno's chorus.

To select A1Chorus, flip the OFF/ON/SELECT switch in the effect section to choose "USER" effect. Then hold down the SHIFT button and flip the OFF/ON/SELECT switch again. It will switch between installed user mod effects. Flip the switch to select A1Chorus.

Sample programs (Prologue and Minilogue XD only)

The sample programs for Alpha 1 are included in the package. There are 16 zipped files in the platform's folder, "Programs_XX.zip" where XX is between 01 and 16. Program files in these 16 archives are identical except for the slot number of Alpha 1. Unzip the one that has the same number as the slot number you installed Alpha 1.



These programs also use A1chorus, and its slot number is assumed to be 1. If you installed A1chorus to the slot other than No.1, edit the programs to choose A1chorus as their modulation fx.

A list of values for the main parameters of the programs is also included in the package.

Appendix I. LFO mode (Prologue and Minilogue XD only)

With Alpha Juno, when LFO modulates PWM with LFO depth set to maximum, the PWM rate fluctuates between 0.5 and 0. On the other hand, with Minilogue XD and Prologue, the PWM rate varies between 1.0 and 0 under the same conditions.



Also, in Alpha Juno, PWM can be either a fixed value or modulated by LFO. On the other hand, in Prologue and Minilogue XD, the LFO value is added to the PWM setting value.

Due to the limitations of the logue SDK, Alpha 1 uses the absolute value of the LFO wave to reproduce the behavior of Alpha Juno when modulating the Shape with the LFO. However, this means that if you set the LFO to a triangle, its frequency will be doubled. Also, if you select a sawtooth, it will be a triangle wave, and if you set the LFO to a square wave, it will be a fixed value.



If you want to use the LFO value as it is, set the value of Parameter 6 "LFO mode" to 2. For example, when modulating the shape parameter with the LFO and you want the Alpha 1's pulse wave to behave the same as the pulse wave of VCO1 / VCO2, you need to select mode 2.

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